

**REMARKS**

Claims 54, 56, 60, 62, 64, 66, 76, 133, 134 and 137 were pending. Claim 54 has been amended to recite that the complements are full-length complements. Claim 56 has been amended to increase the size of the claimed fragments of SEQ ID NO:23. Claim 133 has been amended correspondingly. No new matter has been added.

Applicant thanks the Examiner for indicating that claims 76 and 137 are allowable.

**Rejections Under 35 U.S.C. § 102**

**A.** The Examiner maintained the rejection of claim 54 under 35 U.S.C. § 102(e) as anticipated by Jacobs et al. (US publication 2003/0044935, with priority to US application 09/098,588, filed June 17, 1998). Applicant respectfully requests reconsideration in view of the following.

Applicant has amended claim 54 to recite that complements are full-length complements. Accordingly, the Jacobs application does not anticipate claim 54.

Therefore, in view of the claim amendment, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claim 54 made under 35 U.S.C. § 102(e).

**B.** The Examiner rejected claim 54 under 35 U.S.C. § 102(b) as anticipated by primer sequences provided on page 91 of the New England Biolabs catalog of 1993-1994.

Applicant has amended claim 54 to recite that complements are full-length complements. Accordingly, the New England Biolabs catalog does not anticipate claim 54.

Therefore, in view of the claim amendment, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claim 54 made under 35 U.S.C. § 102(b).

C. The Examiner maintained the rejection of claims 54, 56, 60, 64, 66, 133 and 134 under 35 U.S.C. § 102(a) as anticipated by Bandman et al. (PCT publication WO 00/09709, published February 24, 2000). Applicant respectfully requests reconsideration in view of the following.

Regarding claims 56, 133 and 134, the Examiner indicated that Bandman provides a specific fragment of SEQ ID NO:30 (nucleotides 1190-1234), which corresponds to a fragment of SEQ ID NO:23 of at least 30 nucleotides as is presently claimed. Applicant has amended claim 56 to recite that the minimum size of a fragment of SEQ ID NO:23 that is claimed is 50 nucleotides. The fragment described by Bandman does not meet this limitation. Accordingly, Applicant submits that Bandman does not anticipate any of claims 56, 133 and 134.

The Examiner did not withdraw the rejection of claims 54, 60, 64 and 66 (i.e., the non-fragment claims) over Bandman. However, the Examiner discussed only Applicant's fragment claims with respect to the teachings of Bandman in this Office Action. In the event that Examiner did intend to maintain the rejection of the non-fragment claims, Applicant respectfully requests reconsideration of the arguments presented in the response to the previous Office Action.

In that previous response, Applicant noted differences between SEQ ID NO:30 of Bandman and SEQ ID NO:23 of the instant application. Specifically, SEQ ID NO:30 of Bandman differs from the claimed sequences at a nucleotide corresponding to nucleotide 142 of Applicant's SEQ ID NO:23. Nucleotide 142 of SEQ ID NO:23 (C) is a "T" in SEQ ID NO:30. This nucleotide change results in a different amino acid in the translated polypeptide, and therefore the Bandman sequence is not a degenerate sequence of SEQ ID NO:23. Accordingly, for at least this reason, the Bandman application does not anticipate SEQ ID NO:23 or its complement.

Applicant also wishes to withdraw the argument, made in the previous response, that the claimed invention differs from Bandman in that nucleotide 994 is a “T” in SEQ ID NO:23, but is a “C” in SEQ ID NO:30 of Bandman. Applicant does not wish to rely on this argument at present, and therefore respectfully withdraws it.

Accordingly, in view of the foregoing differences, the Bandman application does not anticipate SEQ ID NO:23 or its complement.

Therefore, Applicants respectfully request that the Examiner reconsider and withdraw the rejection made under 35 U.S.C. § 102(a).

### **Rejections Under 35 U.S.C. § 103**

The Examiner rejected claims 54, 56, 60, 62, 64, 66, 133 and 134 under 35 U.S.C. § 103(a) as unpatentable over Bandman et al. in view of Wang et al. (PCT publication WO 97/29195). The Examiner mentioned claim 66 twice; for the purposes of this response, Applicant assumes that one or these references to claim 66 was intended to refer to claim 64. Applicant respectfully requests reconsideration in view of the following.

Applicant in a previous response provided information demonstrating that SEQ ID NO:30 as described by Bandman is not identical to SEQ ID NO:23 as claimed, nor any of the other nucleic acid molecules claimed in claim 54. In addition, as noted above, Applicant has amended claim 56 to increase the minimum size of claimed fragments of SEQ ID NO:23 to 50 nucleotides. Bandman does not teach a fragment of this size of SEQ ID NO:30, and therefore Bandman’s teaching lacks an essential element of Applicant’s claimed invention.

The Wang reference, which teaches an expression vector comprising an antigenic sequence and a sequence encoding an MHC molecule, does not supply the elements of Applicant’s claimed invention that are missing from Bandman.

Therefore, the combination of the Bandman and Wang reference does not provide Applicant's invention as now claimed. Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection made under 35 U.S.C. § 103(a).

### CONCLUSION

In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the Applicant's attorney at the telephone number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Respectfully submitted,

  
John R. Van Amsterdam, Reg. No. 40,212  
Wolf, Greenfield & Sacks, P.C.  
600 Atlantic Avenue  
Boston, MA 02210-2211  
(617)720-3500

Docket No. L0461.70086US00  
Date: February 3, 2006  
**X02/03/06**